Amendments to the Claims:

The following Listing of Claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims

1-29. (Cancelled)

30. (New) A touch screen calibration system comprising:

a touch screen having a plurality of terminals;

a control circuit associated with each of the terminals for applying a signal to the associated terminal and sensing current flowing through the terminals due to a touch on the touch screen;

a switching circuit for applying a calibration impedance to the touch screen; and

a microprocessor configured to calculate offsets upon application of the calibration impedance, to interpolate the offsets as a function of relative X, Y coordinates of a measured touch position determined from ratios of currents flowing through the terminals, the interpolation using error correction equations containing coefficients calculated by solving simultaneous equations derived from a second order Taylor series expansion, and to apply the offsets to the measured touch position thereby obtaining a corrected touch position.

31. (New) A method for calibrating a touch screen comprising:

applying a signal to terminals of a touch screen;

applying a calibration impedance to the terminals;

sensing an effect on the signal of the calibration impedance applied to the terminals;

calculating an X, Y position indicated for each terminal upon application of the calibration impedance;

calculating an error for each terminal;

interpolating the errors as a function of relative X, Y positions of a measured touch position obtained from ratios of currents flowing through the terminals due to a touch to the touch screen, the interpolation using error correction equations containing coefficients calculated by

solving simultaneous equations that model the screen errors as a two dimensional Taylor series; and

applying the errors to obtain a corrected touch position from the measured touch position.